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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/590,748

Applicant(s)

HANSEN, MORTEN RISE

Examiner

/Jose A. Fortuna/

Art Unit

1741

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-5 and 7-25 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-5 and 7-25 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☒ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SD-03)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date ____

DETAILED ACTION

Drawings

1. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c). No new matter may be introduced in the required drawing. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).

The specification refers to the drawings, but applicants have not submitted any drawings.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the loft in the layers must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the specification from page 9, line 25 through page 13, line 6, describes 4 figures, yet those figures were not submitted. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-5 and 7-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims have been amended to include that the layer has a loft, but such

limitation does not find support in the specification, or in the drawings, since there are not drawings in the application.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-5 and 7-25 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "said layer exhibiting a loft" is not understood in the context. For the purpose of this office action the phrase has been interpreted as the layer having "lofty regions," i.e., elevated regions as compared to other part of the layer.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1-5 and 7-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmidt et al., US Patent No. 6,893,525.

Schmidt et al. teach a method of making a dry-laid web, i.e., air laid, in which papermaking fibers are deposited onto a foraminous belt/fabric with low moisture content, i.e., air laying technique, then the web is pressurized an embossed and then a latex binder is added to either one surface of the formed web or to both surfaces of the web and then the binder is cured to bond the fibers, see column 4, line 45 through column 5, line 8. Schmidt et al. teach that such sequence of steps is very common in the art and it is called, pre-embossing process, which is as its name indicates the embossing is done prior to the bonding of it, which is opposed to the post-embossing technique in which the bonding is done prior to the embossing, see column 1, lines 28-33, see also US Patent No. 4,476,078. Schmidt et al. teach the formation of webs with grammage in the claimed range, i.e., overlapping grammage, see column 5, lines 56-62, i.e., they disclose basis weight between 25 to 400 pounds per 3000 ft², (converts to about 40 to about 651 g/m²). As to the coating grammage of the latex, Schmidt et al., teach that the levels of latex is from about 5 to 35% based in the dry web and dry binder, i.e., total weight, and as stated above the grammage of the web in the range from about 40 to 651 g/m², which means that the coating web can be as low as $40 \times 0.05 = 2 \frac{g}{m^2}$, which falls within the claimed range. They also teach the use of super absorbent polymers, column 6, lines 14-22 and teach that the air laid webs can be made by the methods of US Patent No. 5,128,082 which is incorporated by reference and such reference teaches that the SAP can be either added to the fibers or added to the consolidated web, see column 5, lines 7-26. Schmidt et

al. teach that the binder, which is preferably latex, is sprayed onto the web and it is well known that when latex is sprayed, the latex is an very diluted aqueous solution, i.e. greater than 90% water, so that the binder particles do not clog the spraying nozzles¹. Schmidt et al. teach also the use of vacuum to assist the penetration of the latex into the fibers, see figure 1, stations **42** and **48** and better explained in the US Patent No. 5,128,082 which was incorporated by reference. Even though Schmidt et al. do not explicitly teach the lineal pressure², they incorporated by reference the teachings of US patent No. 4,612,231, and this patent shows that it is common to consolidate the web at lineal pressure between 50 to 300 lbs/lineal inch, see column 5, lines 59-63 of the mentioned patent, such range overlapping the claimed range. As to the configuration of the embossing rolls, Schmidt et al. teach that it is preferred for the roll to have sinusoidal configurations, with raised bosses, i.e., tooth bosses, see column 8, lines 33-63.

Schmidt et al. clearly teach, see paragraph bridging columns 5 and 6, that the web comprises essentially cellulosic fibers, see column 5, lines 59-63, and that synthetic fibers could be used. Even though Schmidt et al. do not explicitly teach the claimed property, i.e., the dust due to fluff, this property must be inherent to the produced web, since they are made using the same ingredients, i.e., raw materials, and using the same process of making. It has been held that “Where the claimed and prior art apparatus or product is identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F. 2d 1252, 1255, 195

¹ See US 5,824,191 see examples or US Patent Application Publication No. 2005/0045295, see ¶-[0102]-[0104], Just to mention a couple.

² Since it is not known what exerts this pressure, i.e., the consolidation pressure or the embossing pressure, for the purpose of this action, it would be considered the consolidation pressure.

USPQ 430, 433 (CCPA 1977). In other words, when the structure or product recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

Note that claim 21 has been rewritten as a product by process claim and the web of the cited reference, as explained *supra*, seem to be the same as the one claimed. In the event any differences can be shown for the product -by-process claim 1 as opposed to the product taught by the reference Schmidt et al. such differences would have been obvious to one of ordinary skill in the art as routine modification of the product in the absence of a showing unexpected results, see *In re Thorpe*, 227 USPQ 964 (CAFC 1985). As the afore mentioned claims are product by process claims, it is deemed that "[A]ny difference imparted by the product by process claims would have been obvious to one having ordinary skill in the art at the time the invention was made because where the examiner has found a substantially similar product as in the applied prior art the burden of proof is shifted to the applicants to establish that their product is patentably distinct, ..." *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Further, "[P]rocess limitations are significant only to the extent that they distinguish the claimed product over the prior art product." *In re Luck*, 177 U.S.P.Q. 523 (1973).

Note that even though Schmidt et al. do not explicitly teach that the web has a lofty region, this is inherent to the invention, since embossing creates compressed regions and uncompressed regions; such no compressed regions are elevated as compared to the compressed regions and therefore form the claimed loft or lofty region.

.Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1-5 and 7-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaiser et al., US patent No. 4,296,161.

Kaiser et al. teach a dry-formed, air-formed, web, which is embossed and the bonded with latex at rate falling within the claimed range, i.e., not more than 5.1 g/m^2 , see abstract. Kaiser et al. teach also that the web has grammage within the claimed range and embossing pressures which also fall within the claimed range, see column 3, lines 46-63. The temperature of the curing of the latex falls also within the claimed range, see column 4, lines 53-68. Kaiser et al. fail to teach the dilution of the latex at the claimed range. However, as discussed above the dilution of the latex at the claimed levels is well known in the art and therefore one of ordinary skill in the art would have reasonable expectation of success if the binder is diluted to the claimed range.

Note that even though Kaiser et al. do not explicitly teach that the web has a lofty region, this is inherent to the invention, since embossing creates compressed regions and uncompressed regions; such no compressed regions are elevated as compared to the compressed regions and therefore form the claimed loft or lofty region.

Response to Arguments

14. Applicant's arguments with respect to claims 1-5 and 7-25 have been considered but are moot in view of the new ground(s) of rejection.

Applicants argue that the cited references do not teach the loft and/or that the web is self supported before or at the embossing station. As explained above the loft, which has been interpreted as "lofty/elevated regions" would be inherent to the cited reference, because such elevated regions are created by the embossing process, see above. As to the self supporting step, this is only part of the product by process claims, not to the method

claims and method steps are only significant when it can be proven that such steps makes a materially different product, i.e., distinguish the product from the prior art. "[P]rocess limitations are significant only to the extent that they distinguish the claimed product over the prior art product." In re Luck, 177 U.S.P.Q. 523 (1973).

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Making Embossed Air-Laid Webs."

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew J. Daniels can be reached on 571-272-2450. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/José A Fortuna/
Primary Examiner
Art Unit 1741

JAF